What is claimed is:

1.   A method for storage handling of stackable storage objects, where the storage objects are supplied in an arrival stack, the storage objects are stored in at least three storage stacks, the storage objects are moved between the said arrival stack and the storage stacks by means of a collector provided with means for securing and releasing the storage objects; control unit provided with a processor controls the movements of the collector via a communications link and in accordance with instructions from a user, which instructions are input to the control unit via a user interface coupled thereto, upon arrival of storage objects in said arrival stack, the control unit is fed with information on the individual identity of each storage object, its type and its position in the arrival stack, wherein said instructions include withdrawal orders which are arranged in a withdrawal list in the control unit in the desired sequence, each withdrawal order concerning a storage object of a certain type, the method comprising the steps of:

a) the control unit searches for the. first unmarked storage object which is requested in the withdrawal order lying next in the withdrawal list and which lies at the top of one of the said storage stacks and/or the arrival stack;

b) in an internal register, the control unit marks the storage object found in step a with a sequence number according to the withdrawal order desired in the withdrawal sequence;

repeating steps a and b as long as there are requested unmarked storage objects;

c) the control unit defines the storage stack which has the lowest unmarked storage object above a storage object marked in step b and assigns this storage stack a first category (A) and assigns other storage stacks a second category (B);

d) if in the storage stack of the first category (A) there are one or more unmarked storage objects above the lowest marked storage object, the collector moves an unmarked or a marked storage object to a storage stack of the said second category (B);

repeating step d until no unmarked storage objects he above the said lowest marked storage object in the storage stack of the first category (A);

e) if, in any storage stack of the second category (B), there is a marked storage object, the collector moves from the lowest storage stack of the said category (B), which contains a marked storage object, an unmarked storage object in this storage stack to a second storage stack of the same category (B), or a marked storage object to a storage stack of the said first category (A);

repeating step e until all the marked storage objects are in the storage stack of the first category (A);

f) the collector moves storage objects lying in the arrival stack to one or more storage stacks of the second category (B);

repeating step f until the arrival stack is empty;

g) the collector moves the uppermost marked storage object from the storage stack of the first category (A) to a storage stack of the second category (B) on which a marked storage object, with the next higher sequence number in relation to the storage object which is moved, lies at the top;

h) if the condition for moving according to step g is not satisfied, the collector moves the uppermost marked storage object from the storage stack of the first category (A) to a storage stack of the second category (B) which has no marked storage object;

i) if the condition for moving according to step h is not satisfied, the collector moves the uppermost marked storage object from the storage stack of the first category (A) to that

storagestack of the second category (B) whose uppermost marked storage object has the lowest sequence number in relation to the uppermost marked storage objects of the other storage stacks of the same category (B);

repeating steps g-i until the storage stack of the first category (A) has no marked storage objects;

j) if all the marked storage objects lie in storage stacks of the second category (B), on marked storage objects with a higher sequence number than their own sequence number or on an unmarked storage object, the sorting is terminated, otherwise the sorting continues at step k;

k) the collector moves the storage object which, among the uppermost marked storage objects in the storage stacks of the second category (B) has a sequence number which is next higher than the sequence number of the storage object lying at the top of the storage stack of the first category (A), to the storage stack of the first category (A);

l) if the condition for moving in accordance with step k is not satisfied, the collector moves the storage object which, among the uppermost marked storage objects in the storage stacks of the second category (B) has the lowest sequence number, back to the storage stack of the first category (A); and

repeating steps k and l until all the marked storage objects are lying in the storage stack of the first category (A).